

Snap without crackle or pop: a rude awakening. A case history of penile fracture

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Abstract

Penile fracture is a rare but worrying condition. The presentation to accident and emergency or primary care should not present difficulty in diagnosis but may cause concern with regard to initial treatment and definitive management. Emergency admission to a urologist is mandatory.

(*J Accid Emerg Med* 2000;17:425–426)

Keywords: penile fracture; urology

Case report

A 32 year old white man presented to the accident and emergency (A&E) department of Bradford Royal Infirmary complaining of discomfort and bruising of his penis over a four hour period. That morning he had awoken with an erection, he wanted to pass urine and as a result had forcefully bent his penis. On bending the shaft of his penis he heard a “loud snap” and he experienced pain, loss of penile tumescence and swelling and bruising of his penis. His partner who was in the next room also heard the “snap” and insisted that they go to an A&E department. The swelling of the penis increased up until the time of assessment.

Examination in the A&E department revealed a flaccid penis with a large fluctuant haematoma on the dorsal aspect of his penis stretching from the base of the shaft to the glans. There was some tenderness on palpation. The patient had micturated successfully since sustaining the injury without any frank haematuria.

Investigations performed included a full blood count, coagulation profile and urea and electrolytes, all of which were normal.

The patient was referred urgently to the urology service.

Discussion

Fracture of the penis has attracted interest in the medical literature from many countries including Zimbabwe, Taiwan, Scandinavia, India, Iran, Hungary, the United States and England.¹ Penile fracture is caused by a traumatic rupture of the tunica albuginea of one or both corpora cavernosa. The fracture is most frequently reported as happening to the erect penis during sexual intercourse, but it has been reported after manipulation and falling onto the erect penis.

In St George's Hospital in London 0.25% of all emergency urology admissions are attributable to penile fracture.² The differential diagnosis includes a tear of the deep dorsal vein of the penis. Classically the condition presents

with a sudden snap, pain, detumescence and a haematoma of the penis with deformity. The “snap” heard when the tunica albuginea tears has been well described, as has the fact that it is also often heard by the sexual partner if the fracture occurs during coitus. To our knowledge this is the first time that the snap has been reported as having been heard by a partner not in the same room at the time of fracture. Clinical examination consistently reveals a smooth, fixed, tender, palpable lump at the fracture site. This lump apparently is formed by a clot in the torn corpus cavernosum, trapped in its well localised position by Buck's fascia.³ Investigations suggested for the condition include ultrasonography, cavernosography, magnetic resonance imaging, urethrography and surgical exploration. Dissection in this condition tends to reveal a tear in the proximal third of the corpus cavernosum.¹

Complications of the disorder include concomitant urethral injuries (20%), penile curvature, abscess formation, penile pain, pulsatile diverticulum, urine extravasation, psychophysical problems, and impotence.^{3,4} Urethral injury should be suspected if there is blood at the meatus or failure to pass urine.

Treatment may be conservative or operative. Conservative regimens include catheterisation once a urethral injury has been ruled out, pressure dressings, penile splinting, diazepam, non-steroidal anti-inflammatory drugs and even oestrogen therapy.⁵ The rationale for the use of diazepam is that it reduces the frequency and intensity of erections and so lessens discomfort.

The more recent literature seems to favour operative management to lessen the likelihood of complications that are more common in the conservatively treated group, up to 53% in the study by Kalash *et al.*⁶ The operative management of the condition ideally is as soon as possible.⁷ The surgical approach may include a procedure under local anaesthesia or the more extensive circumferential or longitudinal incision and degloving of the penis to evacuate the haematoma and locate and repair the tear.^{3,4}

Conclusion

Penile fracture is a rare condition but it merits sensitive handling and urgent referral to a urologist for further management.

Funding: none.

Conflicts of interest: none.

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Accepted 26 April 2000

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Brugada syndrome—the missed epidemic

J M Butler

Abstract

About 10–20% of patients dying suddenly or resuscitated from ventricular fibrillation do not have demonstrable heart disease. These people are often young and tragically in some cases sudden death is the first and only clinical event. One of the three main electrophysiological diagnoses to be considered in these situations is the Brugada syndrome. A case of Brugada syndrome is described, together with an example of the classic electrocardiographic manifestations and a discussion of the possible aetiology, diagnosis and management of this condition.

(*J Accid Emerg Med* 2000;17:426–428)

Keywords: Brugada syndrome

Case report

At approximately 6 pm one evening, a 29 year old man presented at the accident and emergency (A&E) department in a critical condition. The history obtained from both the paramedics and police was unusual. The policeman had been driving his car on the motorway when the car in front, carrying a single occupant, suddenly veered off the road, crashed through a barrier and came to a stop in a field. The policeman found the driver to be in cardiorespiratory arrest, and started resuscitation at the scene. On arrival, the paramedics discovered the driver's initial cardiac rhythm to be ventricular fibrillation and he was success-

fully defibrillated. During transfer to the A&E department he required defibrillation for a further episode of ventricular fibrillation.

On arrival in hospital he was agitated, with a Glasgow Coma Score of 8/15 but was breathing spontaneously with a partially obstructed airway. The monitor showed normal sinus rhythm with an initial blood pressure of 130/80. He was given a rapid sequence induction of anaesthesia to maintain and protect his airway. Initial primary and secondary trauma surveys revealed no obvious injury and initial chest, pelvis, and c-spine radiographs were unremarkable. Initial speculative diagnoses included spontaneous intracerebral haemorrhage, cardiac arrhythmias and convulsion. The patient had urgent computed tomography of the head, which was normal. Further history from the family revealed no previous medical problems and no relevant drug history.

The initial 12 lead electrocardiograph (ECG) (see fig 1) showed a partial right bundle branch block with ST segment elevation in chest leads V1 to V3. At this stage a primary cardiac problem was thought to be more likely. Urgent echocardiography to look for structural cardiac disease was performed. No abnormality was found. Throughout this time period the patient maintained a normal sinus cardiac rhythm. He was transferred to an intensive care bed and weaned uneventfully from ventilation over a period of 24 hours. Toxicology screening was negative.

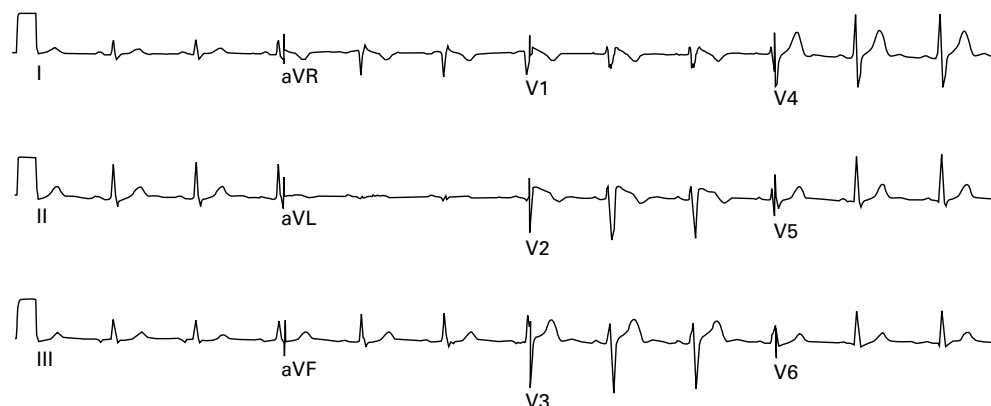


Figure 1 ECG showing classic ST segment elevation in chest leads V1–V3 with right conduction delay.

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Accepted 29 February 2000